

**REMARKS**

Claims 1-12 are all the claims pending in the Application.

The Examiner objected to claim 10, on the ground that the claim is directed to a method and the preamble concludes with “the system including” followed by method recitations. It is respectfully submitted that a person of ordinary skill in the art would have understood the claim as drafted. However, Applicant amends the claim to expedite prosecution of the claim. The amendment is a minor change in wording and is not a narrowing amendment. No estoppel is created.

***Rejection of Claims 8 and 10 under 35 U.S.C. § 112***

Claims 8 and 10 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. This rejection is traversed.

It is respectfully submitted that a person of ordinary skill in the art would have understood the claims as drafted. However, Applicant amends claims 8 and 10 to expedite prosecution of the claims. These amendments constitute minor changes in wording and are not narrowing amendments. No estoppel is created.

***Rejection of Claims 1, 2, 6, 7, 10, 11, and 12 under 35 U.S.C. § 103***

Claims 1, 2, 6, 7, 10, 11, and 12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hachimura, U.S. Patent No. 6,327,477 in view of Sotek et al., WO 97/38370, previously used. This rejection is traversed.

The Office Action Summary lists claim 9 as being rejected, but the Detailed Action section of the Office Action does not identify the grounds of rejection. Applicant assumes that like claim 7, claim 9 was rejected as depending from rejected claim 6. If this was not the Examiner's intention, the Examiner is requested to correct in writing Applicant's understanding.

Claims 1, 2, 6, 10 and 12 each require, *inter alia*, a plurality of unit IDs preliminarily registered in each of the slave telephone sets. Hachimura discloses a wireless communication apparatus and system in which a master unit is connected to a slave unit (e.g. Hachimura, Fig. 1). The Examiner acknowledges that Hachimura does not disclose unit IDs preliminarily registered in the slave and master units. In fact, Hachimura does not disclose or suggest an ID for a slave unit. Therefore, Hachimura belongs to the prior art discussed by Applicant's disclosure.

Sotek discloses (1) a communication system with a master station and a slave station (E.g. Abstract; col. 1, lines 14-16), which is physically connected by wires (E.g. Figs. 1 and 4). Sotek discloses that each slave station has one identification code ID, and that this ID is different for all the slave stations connected to the communication system. (Sotek, e.g. col. 4, lines 23-26; Fig. 3, shows the ID register storing the slave station's unique ID.) Sotek does not disclose or suggest a plurality of IDs for each slave set. Further, Sotek does not disclose or suggest a plurality of IDs preliminarily registered in each slave set, as *inter alia* required by claims 1, 2, 6, 10 and 12. Therefore, Hachimura and Sotek do not disclose or suggest each of the recitations of claims 1, 2, 6, 10 and 12.

Further, there is no suggestion or motivation to combine Hachimura and Sotek. The Examiner alleges that the motivation would have been to allow detection, notification and confirmation of communicable slave units for the processing of incoming calls. However, it is respectfully submitted that this general purpose would not have led a person of ordinary skill in the art to Applicant's claimed invention. Specifically, by way of example among other reasons, a person of ordinary skill in the art would not have been led to a plurality of unit IDs preliminarily registered in each of the slave telephone sets.

Claim 7 depends from claim 6. Claim 11 depends from claim 10. Thus, claims 7 and 11 incorporate the recitations of their respective base claims. Therefore, claims 7 and 11 are patentably distinguishable over the prior art for at least the reasons that their respective base claims are patentably distinguishable over the prior art.

The Examiner objected to claims 3 and 5 as being dependent from a rejected claim, but stated that claims 3 and 5 would be otherwise allowable. Claims 3 and 5 depend from claims 1 or 2. Applicant's belief is that the rejection of claims 1 and 2 is overcome, therefore, claims 3 and 5 are now allowable.

***Rejection of Claim 4 under 35 U.S.C. § 103(a)***

Claim 4/1 and 4/2 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hachimura in view of Wakayama, et al., U.S. Patent No. 6,212,221. This rejection is traversed.

Wakayama does not cure the deficiencies of Sotek. Wakayama discloses a communication apparatus having master sets with slave sets connected wirelessly using a spread

**AMENDMENT UNDER 37 C.F.R. § 1.111**

**Q56197**

U.S. Application No.: 09/415,205

spectrum communication method. Wakayama does not disclose a plurality of unit IDs registered in the master set. Therefore, Hachimura, Sotek and Wakayama do not disclose or suggest all the recitations of claim 1 and 2.

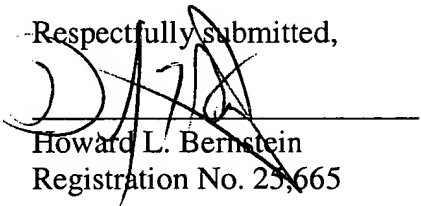
Claim 4 depends from claim 1, or in the alternative from claim 2. Thus, claim 4 incorporates the recitations of either claim 1 or 2. Therefore, claim 4 is patentably distinguishable over the prior art for at least the reasons that claims 1 or 2 are patentably distinguishable over the prior art.

In view of the foregoing discussion, reconsideration and allowance of this Application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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**APPENDIX**

**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**IN THE SPECIFICATION:**

**The specification is changes as follows:**

**Page 1, first full paragraph:**

The present invention relates to radio telephone systems such as cordless telephones which performs communication with the remote caller (opposite side) through connection a public telephone line or network by radio communication between a slave telephone set and its master telephone set.

**Page 1, third full paragraph:**

In the PHS, it is possible to use the same slave telephone set (terminal) for communication both indoors (i.e., in home or in office) and outdoors. Indoors, the slave telephone set can be connected to the public telephone network by its master telephone set. Outdoors, it can be connected to the public telephone network via a base station installed by a dealer. In the PHS, it is also possible that slave telephone sets ~~can~~ be used for communication between them just like transceivers without agency of any base station.

**Page 1, paragraph bridging pages 1 and 2:**

It is prescribed as standards to register ID codes for identifying units in both the master and slave telephone sets in the radio communication system. In the manufacture of the master and slave telephone sets, unit IDs are each registered in each of the master and slave units. Unit IDs preliminarily registered in slave units are registered in master units by registering operation, and unit IDs preliminarily registered in the master telephone sets are registered in the slave units ~~by like operation~~. Unless unit IDs are identical, it is impossible to start radio communication.

**Page 3, second full paragraph:**

When the master receives the line connection request and the unit ID, it checks whether the received unit ID is of its own slave telephone set. If the two unit IDs are identical, the master telephone set finds a vacant communication channel, and assigns the found vacant communication channel n to the slave telephone set.

**Page 5, second full paragraph:**

The present invention was made in order to solve the above problems, and its object is to provide a radio telephone system, in which one slave telephone set can simultaneously use two or more channels for radio communication.

**Page 6, second full paragraph:**

According to another aspect of the present invention, there is provided a radio telephone system, in which a plurality of slave telephone sets is connected to a public telephone network through radio communication with a master telephone set, wherein: a plurality of unit IDs ~~are~~ is preliminarily registered in each of the slave telephone sets, and the plurality of unit IDs ~~are~~ is also registered in the master telephone set and whenever each slave telephone set makes radio communication with the master telephone set, an unit ID corresponding to the radio communication is selected.

**Page 6, paragraph bridging pages 6 and 7:**

According to another aspect of the present invention, there is provided a radio telephone system, in which a plurality of slave telephone sets is connected to a public telephone network through radio communication with a master telephone set and a plurality of unit IDs ~~are~~ is preliminarily registered in each of the slave telephone sets, and the plurality of unit IDs ~~are~~ is also registered in the master telephone set, the system including steps of: in response to hooked off of a first telephone set call to the opposite side, transmitting a line connection request signal and selected unit ID among the preliminarily registered unit IDs on a control channel to the master telephone set; in response to receipt of the line connection request and the unit ID, checking whether the received unit ID is of its own slave telephone set by the master telephone set; if the unit IDs ~~s~~ is is identical, finding a vacant communication channel and assigning this vacant communication channel to the slave telephone set; in response to the assignment of

communication channel, checking whether that communication channel is vacant and, if it is vacant, transmitting a confirmation signal by the slave telephone set; and in response to receipt of the confirmation signal from the slave unit, executing operation of line connection to the public telephone network by the master telephone set;

**Page 8, paragraph bridging pages 8 and 9:**

According to a further aspect of the present invention, there is provided a radio telephone system, in which a plurality of slave telephone sets is connected to a public telephone network through radio communication with a master telephone set and a plurality of unit IDs~~are~~ is preliminarily registered in each of the slave telephone sets, and the plurality of unit IDs~~are~~ is also registered in a plurality of master telephone sets, the system including steps of: responsive to arrival of a telephone call, informing the call arrival to the slave telephone set and transmitting its unit ID by the master telephone set; checking whether the two unit IDs~~s~~ are identical and selecting one of the plurality of unit IDs registered if they are identical and transmitting the selected unit ID to the master telephone set by the slave telephone set; finding a vacant communication channel for communication and informing the found communication channel to the slave telephone set by the master telephone set; checking whether the received communication channel is vacant and if it is vacant, transmitting a confirmation signal by the slave telephone set; and sending out via the communication channel an instruction to ring the bell to the slave telephone set when state ready for communication is brought about.



**Page 10, paragraph bridging pages 10 and 11:**

A communication channel control unit 3 has a unit ID selecting function of flexibly selecting, whenever the radio communication is performed, the unit ID corresponding to the radio communication among a plurality of unit IDs preliminarily registered in an ID register unit 5. A total control unit 4 controls whole radio communication controls of all slave units. In the ID register unit 5, a plurality of unit IDs preliminarily registered at the time of the manufacture of the slave controls the radio communication control and line communication control. In the ID register unit 15, a plurality of unit IDs preliminarily registered at the time of the manufacture of the slave unit are registered. The unit ID of the master telephone set is also registered in the ID register unit 5 by the registering operation. The line control unit 16 controls the public telephone network.

**Page 13, paragraph bridging pages 13 and 14**

When the master and slave telephone sets are not in communication, they are in a stand-by state. When the telephone set A connected to the ~~slave~~ master unit is hooked off to make (or transmit) a telephone call to the opposite side, a line connection request is transmitted on the control channel to the ~~master~~ master set. At this time, a unit ID (XX) which is flexibly selected by the communication channel control unit 3 among the unit IDs (XX, YY) registered in the ID register portion 5, is also transmitted.

**Page 18, first full paragraph:**

Furthermore, since radio communication is controlled not for each slave set but for each radio communication (or communication channel) with unit IDs, by adapting each slave telephone set to be able to utilize both analog radio communication and digital radio communication, it is possible to permit selective use of the analog radio communication and the digital radio communication for each radio communication.

**IN THE CLAIMS:**

**The claims are amended as follows:**

2. (Amended)            A radio telephone system, in which a plurality of slave telephone sets is connected to a public telephone network through radio communication with a master telephone set, wherein:

a plurality of unit IDs are preliminarily registered in each of the slave telephone sets, and the plurality of unit IDs are also registered in the master telephone set and whenever each slave telephone set makes radio communication with the master telephone set, an unit ID corresponding to the radio communication is selected.

3. (Amended)            The radio communication system according to claim 1 or 2, wherein the plurality of unit IDs registered in each slave telephone set is ~~are~~ registered in a plurality of master telephone sets.

4. (Amended) The radio telephone system according to claim 1 or 2, wherein each slave telephone set is capable of utilizing both analog radio communication and also digital communication.

5. (Amended) The radio communication system according to claim 1 or 2, wherein the plurality of unit IDs registered in each slave telephone set ~~is~~ are registered in a plurality of master telephone sets and each slave telephone set is capable of utilizing both analog radio communication and also digital communication.

8. (Amended) The radio telephone system according to claim 6, wherein when a ~~the~~ second telephone set is hooked off to discontinue its communication in the state that both the first and second telephone sets are in communication, a communication "off" request is transmitted from the second telephone set to the master telephone set; and

in response to receipt of the communication "off" signal, the master telephone set transmits a communication "off" signal to the second telephone set, thus ending the communication and restore the second telephone set to the stand-by state.

10. (Twice Amended) A radio telephone communications method , in which a plurality of slave telephone sets is connected to a public telephone network through radio communication with a master telephone set and a plurality of unit IDs are preliminarily registered in each of the slave telephone sets, and the plurality of unit IDs ~~is~~ are also registered in a plurality of master telephone sets, the method ~~system~~ including:

responsive to arrival of a telephone call, informing the call arrival to the slave telephone set and transmitting its unit ID by the master telephone set;

checking whether the transmitted unit ID matches at least one of the plurality of registered unit IDs for the slave telephone set ~~two unit IDs are identical and~~, selecting one of the plurality of unit IDs registered if a match is determined ~~they are identical~~, and transmitting the selected unit ID to the master telephone set by the slave telephone set;

finding a vacant communication channel for communication and informing the found communication channel to the slave telephone set by the master telephone set;

checking whether the received communication channel is vacant and if it is vacant, transmitting a confirmation signal by the slave telephone set; and

sending out via the communication channel an instruction to ring the bell to the slave telephone set when state ready for communication is brought about